

Academic Supervision and GROW Coaching Model Implementation in Junior Secondary Science Teaching

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Abstract

Purpose: This study evaluates academic supervision combined with the Goal Reality Options Will (GROW) coaching model for a junior secondary science teacher, describing how supervision and coaching jointly support instructional quality and identify barriers to classroom conductivity.

Methodology: A descriptive case study was conducted at SMPN 4 Mesuji, Lampung, involving one science teacher and one grade VIII class during a Problem Based Learning (PBL) lesson on the human digestive system, using a lesson-plan checklist, an observation instrument, a coaching-practice rubric, a structured interview, and the GROW coaching protocol, analyzed descriptively through instrument scoring formulas.

Results: The learning-process observation instrument recorded 42 fully implemented indicators, 3 partially implemented, and 1 not implemented, producing a raw score of 89 and a final score of 94.7, categorized as very good. The coaching-practice rubric produced 19 of 20 possible points, equivalent to a final score of 95, also categorized as very good. Interview and GROW coaching data revealed classroom conductivity and unattractive instructional media as the dominant obstacles, with Canva-based media redesign proposed as corrective action.

Conclusions: Supervision paired with GROW coaching effectively surfaces actionable instructional problems even when overall teaching performance is already rated very good.

Limitations: Findings rest on a single teacher and single lesson observation, limiting generalization.

Contributions: The study offers a replicable supervision-coaching protocol and scoring framework for science teacher development in similarly resourced schools.

Keywords: *Academic Supervision, Classroom Conductivity, GROW Coaching, Instructional Media, Science Teaching*

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1. Introduction

Effective teaching does not emerge automatically from good intentions; it depends on careful planning, continuous monitoring, and structured feedback that helps teachers refine their practice over time. Education itself functions as a humanizing process, granting every learner an equal opportunity to develop through guided instruction from childhood into adulthood, a view that positions the teacher

as the central figure whose classroom decisions shape whether that opportunity is realized ([Desi Pristiwanti et al., 2022](#)). When teaching quality is left unexamined, gaps between planned and enacted instruction can persist unnoticed, ultimately limiting student learning outcomes regardless of how well a curriculum has been designed on paper.

Academic supervision exists precisely to close this gap between planning and practice. Supervision is best understood as a recurring, structured process, comparable to periodic visits and performance review, grounded in a sustained relationship intended to strengthen organizational processes, management, and service delivery, including oversight of working procedures, maintenance of facilities, and monitoring of performance so that these functions become broader and more effective over time ([Rahman, 2021](#)). Three purposes anchor this process: professional development, motivation building, and quality control, carried out according to principles that are practical, systematic, objective, realistic, anticipatory, constructive, cooperative, collegial, democratic, active, humanistic, continuous, integrated, and comprehensive ([Rahman, 2021](#)). In schools, this supervisory function is typically exercised by the principal, whose role in guiding continuous improvement has been repeatedly linked to stronger teacher performance and, indirectly, to better student outcomes ([Santosa et al., 2024](#)).

Alongside formal observation, coaching has emerged as a complementary supervisory technique particularly suited to solving concrete instructional problems identified during classroom visits. Coaching is a development intervention focused on specific, individual targets, carried out through dialogue and direct classroom observation rather than lecture-style training, in which the coach helps the coachee, typically the teacher being supervised, explore options and reach their own conclusions through structured questioning rather than being told what to do ([Pratama, 2023](#)). Among the available coaching frameworks, the GROW model, structured around Goal, Reality, Options, and Will, has gained particular traction in educational settings because its four-stage structure translates naturally into a supervisory conversation that begins by clarifying a lesson's purpose, moves to an honest account of what actually happened, explores possible solutions, and closes with a concrete commitment to action ([Anisur Rahman, 2023](#)).

This combination of structured observation and GROW-based coaching becomes especially relevant in science education, where lessons often depend on visual and hands-on media, laboratory or simulated practical activity, and sustained student attention across multi-stage inquiry processes. A Problem Based Learning lesson on the human digestive system, the case examined in this study, exemplifies these demands: it requires the teacher to present anatomical content through media capable of sustaining interest, to manage small-group discussion and presentation, and to guide students toward synthesizing their own conclusions, all within a fixed class period. Any weakness in classroom conducivity or instructional media design under these conditions can directly undermine the discovery-oriented purpose of the lesson, making this an instructive site for examining how supervision and coaching jointly diagnose and address such weaknesses.

The present study was conducted at SMPN 4 Mesuji, a junior secondary school in Way Serdang Subdistrict, Mesuji Regency, Lampung Province, as part of a structured practicum in educational supervision. The practicum required the supervisor-in-training to plan, observe, and coach a partner science teacher through a complete supervision cycle, from pre-observation planning through classroom observation to post-observation coaching, generating both quantitative instrument scores and qualitative interview and coaching transcripts. This dual dataset offers a useful window into how supervision, when paired with coaching, can move beyond a summary numeric rating toward specific, teacher-owned solutions for identified weaknesses.

Based on this background, the study addresses three questions. First, how does the science teacher's lesson-plan and classroom-practice performance score against the applicable supervision instruments. Second, what specific instructional problems emerge from interview and GROW coaching data, particularly regarding classroom conducivity and instructional media. Third, what corrective actions does the coaching process generate, and how feasible are they for the teacher to implement.

Correspondingly, the study aims to describe the results of academic supervision instruments applied to a science teacher's lesson planning and classroom practice, to identify the internal barriers surfaced through interview and coaching dialogue, and to document the GROW-based solution the teacher herself formulated. The findings contribute to the practical literature on combining structured supervision instruments with dialogic coaching in resource-constrained junior secondary science classrooms, offering school leaders and supervisor-trainees a concrete illustration of how numeric performance ratings and qualitative coaching insight can be read together rather than in isolation.

2. Literature Review

2.1 *Academic Supervision as Instructional Leadership*

Academic supervision, derived from the English term to supervise, refers to a process of directing and supporting teachers and staff so that their instructional functions operate more effectively ([Karwati, 2019](#)). Rather than functioning as a fault-finding inspection, contemporary supervision positions the supervisor as an active listener capable of offering both theoretical grounding and practical perspective, distinguishing modern supervisory practice from the older, authoritarian model in which supervisors primarily searched for teacher errors ([Karwati, 2019](#)). This distinction matters because supervisory behavior tends to mirror the broader organizational culture in which it operates; overly corrective supervision, sometimes labeled snooper vision, tends to emerge under authoritarian management styles, while contemporary and clinical supervision models rely instead on planned, continuous, and instrument-supported observation grounded in objective, real classroom data.

Recent studies confirm that principal-led academic supervision remains strongly associated with improved teacher professional competence when implemented consistently and collaboratively rather than punitively. Collaborative supervision approaches have been shown to raise teacher competence across material mastery, teaching ability, and reflective practice simultaneously, rather than isolating a single dimension of performance ([Sopacuaperu et al., 2025](#)). Comparative case evidence from multiple elementary schools further shows that principals who provide continuous, relationship-based guidance measurably strengthen teachers' social and pedagogical competence, reinforcing supervision's role as a developmental rather than evaluative-only mechanism ([Santosa et al., 2024](#)). At the same time, teacher competence itself must adapt to a changing instructional environment; digital-era teaching competence increasingly requires teachers to integrate technology meaningfully into lessons, a demand that supervision instruments must account for when assessing instructional media use ([Sitompul, 2022](#)).

2.2 *Instruments and Cycles of Academic Supervision*

Academic supervision is typically operationalized through a defined set of instruments corresponding to distinct stages of the instructional process: checklists for lesson-plan review, structured observation instruments for classroom practice divided into introductory, core, and closing activities, and post-observation interview protocols. [Karwati \(2019\)](#) delineates six categories of such instruments, spanning planning review, lesson-plan systematics, classroom-practice observation, and learning-outcome assessment, an architecture that mirrors the four-stage cycle of planning, implementation, evaluation, and follow-up through which supervision is meant to progress ([Larasati, 2019](#)). This cyclical structure aligns closely with international frameworks describing supervision as an ongoing process combining trust building, observation, and instructional dialogue rather than a single evaluative snapshot by [Brandon, Hollweck, Donlevy, and Whalen \(2018\)](#), a framing consistent with the more recent finding that supervision grounded in continuous, dialogic engagement outperforms one-off inspection in shifting teacher practice ([Imamah & Churrahman, 2022](#)).

Quantified supervision instruments, expressed through a percentage-based scoring formula applied to checklist indicators, allow supervisors to translate qualitative classroom observation into a comparable numeric performance category, typically ranging from very good through good and adequate to needing improvement. Such scoring systems, while useful for accountability and comparison across observation cycles, carry an important limitation: a high aggregate score can still mask specific, localized weaknesses, such as underused instructional technology or ineffective classroom-management strategy, that require qualitative follow-up to surface ([Dorukbasi, 2024](#)). This limitation

motivates pairing quantitative instruments with a structured coaching conversation capable of isolating the specific source of any shortfall the numeric score alone cannot explain.

2.3 The GROW Coaching Model in Educational Supervision

Coaching, understood as a development intervention distinct from mentoring, counseling, or classroom-style training, centers on helping an individual reach their own solution through active listening, clarifying questions, and constructive feedback rather than expert prescription ([Pratama, 2023](#)). Effective coaching interactions generally proceed through five behavioral steps: establishing trust, listening actively, clarifying the issue under discussion, asking well-targeted questions, and providing feedback that supports the coachee's own decision-making ([Tiara, 2016](#)).

Among structured coaching frameworks, the GROW model, an acronym for Goal, Reality, Options, and Will, has become one of the most widely adopted in educational supervisory contexts because its sequential structure closely mirrors a natural supervisory conversation. Recent applications of GROW-based supervision report that instructional leaders and teachers experience meaningful professional growth through this model, even when contextual constraints such as limited time and heavy workload are present, provided the coaching is embedded into regular collegial structures rather than treated as an additional burden ([Sadewo, Wibawa, Hanafi, & Purnasari, 2025](#)). Coaching-based academic supervision has similarly been found to improve teacher performance in implementing differentiated instruction, suggesting that the model's benefit extends beyond generic performance improvement to specific pedagogical innovations a teacher is attempting to adopt ([Nawas, 2023](#)). Evidence from professional development programs applying GROW in institutional settings further indicates that the model's explicit progression from goal clarification to committed action helps coachees convert reflective insight into a concrete, time-bound plan rather than leaving the reflection unresolved ([Anisur, 2023](#)).

Clinical and coaching-integrated supervision models have also been shown to strengthen teacher competence and performance when implemented systematically rather than sporadically, reinforcing the expectation that a single well-structured coaching cycle, if it reaches a clear and specific action commitment, can meaningfully influence subsequent teaching practice ([Kamaluddin, Rahmadani, Rianti, Fitriani, & Warman, 2024](#)). Related applications of alternative structured coaching sequences, such as the Tirta model used in academic supervision to improve elementary learning quality, similarly show that a defined conversational sequence, rather than unstructured feedback, is what drives measurable improvement in supervised lessons ([Safikin & Dianti, 2024](#)). International evidence on coaching in simulated and real classroom environments corroborates this pattern, showing that structured coaching interactions, even brief ones, can shift specific instructional behaviors when the coaching dialogue remains focused on a well-defined problem by [Cohen, Wong, Krishnamachari, and Berlin \(2020\)](#), while preparatory training of novice coaches has been found to strengthen the fidelity with which such structured coaching conversations are later delivered in real supervisory settings ([Brodeur, Mrachko, Phillips, & Compton, 2024](#)). At the level of teachers' own perception of their job performance, instructional supervision from academic heads has similarly been linked to stronger self-reported performance outcomes, reinforcing supervision's broader credibility as a performance-supporting mechanism rather than a purely evaluative exercise ([Castillo, 2025](#)).

Quality-management perspectives on academic supervision further emphasize that consistent, well-documented supervisory practice, rather than occasional or poorly recorded visits, is what ultimately drives sustained teacher performance gains with [Santosa, Widyawati, Sutopo, and Narimo \(2024\)](#) and [Zulfakar \(2020\)](#), a point directly relevant to the present case study's emphasis on structured, instrument-based documentation across the full supervision cycle.

2.4 Instructional Media and Classroom Conducivity in Science Teaching

Classroom conducivity, understood as the degree to which a learning environment sustains student attention, participation, and orderly behavior, is repeatedly identified in supervision literature as one of the most persistent challenges teachers face, particularly during content-heavy science lessons. Because today's students have grown accustomed to combined visual and verbal information delivery,

instructional media relying on text-heavy slides or static charts alone often fail to sustain attention compared with more dynamic, multimedia-rich alternatives. Digital design platforms such as Canva have been shown to address this gap directly: Canva-based instructional media has been found to improve science learning outcomes by presenting content through visually rich, easily customizable infographic and multimedia formats that increase student engagement and conceptual understanding compared with conventional slide-based media ([Rosyid & Setyasto, 2024](#)).

Beyond science-specific applications, Canva has demonstrated broader instructional value across subject areas, functioning as an effective tool for improving student engagement, comprehension, and cognitive development in general classroom activities of [Jamaludin and Sedek \(2024\)](#) and for enhancing student motivation and creativity when used to design accessible instructional materials ([Hutapea, Manullang, & Hartati, 2024](#)). Direct application to natural science instruction at the elementary level shows that Canva-based media use is associated with improved learning outcomes relative to conventional media with [Bella, Huda, Setyowati, and Nurodin \(2024\)](#), while qualitative classroom studies confirm that Canva-based interactive science media supports student engagement even in resource-limited elementary school settings ([Edlin, Reni, Hermita, & Barokah, 2025](#)). Evidence from higher education classrooms further shows that embedding tools like Canva can support a more dialogic, socially engaged classroom culture rather than simply improving visual appeal by [Hinchcliff and Mehmet \(2023\)](#), suggesting that the benefit of such tools extends beyond aesthetics to genuine pedagogical interaction.

Complementing media considerations, problem based learning itself has an established evidence base for improving student engagement and critical thinking in science classrooms, provided that classroom management and engagement challenges are actively addressed rather than assumed to resolve automatically once the model is adopted. Systematic evidence shows that problem based learning fosters critical thinking skills across diverse science education contexts with [Anggraeni, Prahani, Suprpto, Shofiyah, and Jatmiko \(2023\)](#), and grade-level applications confirm meaningful gains in critical thinking ability when the model is implemented with adequately engaging supporting media ([Adnyani & Suniasih, 2023](#)). Video-assisted problem based learning has likewise been found to improve elementary science learning outcomes relative to lecture-only delivery by [Sari and Enjoni \(2023\)](#), a flipped, technology-supported variant of problem based learning has been shown to sustain engagement even in an online curriculum delivery format by [Nugroho and Hermasari \(2023\)](#), and a broader meta-analysis confirms that Problem Based Learning's positive effect on academic achievement holds across varied classroom contexts, though effect size depends on implementation fidelity ([Orhan, 2025](#)). Combined problem based learning and Canva-based media approaches have been specifically documented to strengthen elementary science instruction, directly supporting the pairing of pedagogical model and instructional media examined in this study by [Ansyah and Salsabilla \(2025\)](#), while natural science lessons using Canva media with young learners in another Indonesian district similarly reported improved lesson delivery and student interest ([Salminawati, Mayang, & Syafii, 2023](#)).

2.5 Working Propositions

Because this study follows a descriptive case study design rather than a hypothesis-testing quantitative design, it advances working propositions rather than statistically formalized hypotheses. The first proposition holds that a science teacher implementing problem based learning with adequate lesson-plan preparation will score in the very good category on structured classroom-practice observation instruments, even where isolated indicators remain only partially met. The second proposition holds that structured interview and GROW coaching dialogue will surface specific instructional weaknesses, particularly classroom conducivity and instructional media attractiveness, that a single aggregate numeric score cannot by itself reveal. The third proposition holds that a GROW-structured coaching conversation will lead the teacher to formulate a concrete, self-owned corrective action, consistent with evidence that GROW-based coaching translates reflective insight into committed action more effectively than unstructured post-observation feedback ([Artanti, 2024](#)).

2.6 Lesson and Observation Context

The observed lesson addressed the human digestive system, delivered to a grade VIII class across two lesson hours using the Problem Based Learning model, supported by PowerPoint slides and a printed chart as instructional media, delivered face to face. Classroom observation was conducted on Thursday, November 2, 2023, between 07:30 and 08:50 local time, during the class's regular schedule. A separate coaching-practice rehearsal, conducted online using the GROW technique with a different practice partner and an independent observer, was held on October 28, 2023, while the post-observation coaching session with the actual partner teacher was conducted online on November 26, 2023, following mutual scheduling agreement that accounted for both parties' availability ([Sutopo, Narimo, Widyawati, & Santosa, 2024](#)).

3. Research Methodology

3.1 Research Design

This study used a descriptive case study design intended to document, rather than statistically test, the implementation and outcomes of an academic supervision cycle combined with GROW-based coaching. A descriptive case study was considered appropriate because the object of investigation was a specific, bounded instructional event, a single Problem Based Learning lesson delivered by one science teacher, together with the subsequent coaching interaction addressing problems identified during that lesson, rather than a phenomenon requiring comparison across multiple classes or statistical inference across a larger population ([Sugiyono, 2022](#)).

3.2 Research Setting and Participants

The study was conducted at SMPN 4 Mesuji, located in Gedung Boga, Way Serdang Subdistrict, Mesuji Regency, Lampung Province. The participating partner teacher was a science teacher at the school, supported by the school principal, who approved and facilitated the supervision activity. The supervisor-in-training served as the practitioner conducting observation, interview, and coaching, with an independent observer present during the separate coaching-practice rehearsal to provide an additional rating of the supervisor's own coaching competence.

3.3 Instruments

Four instruments structured data collection. The first instrument was a lesson-plan checklist verifying the teacher's written lesson plan against the simplified lesson-plan format mandated by the Ministry of Education and Culture Circular Letter Number 14 of 2019 on Lesson Plan Simplification, with each component marked yes or no according to whether it matched the simplified standard. The second instrument was a classroom-practice observation instrument covering introductory, core, and closing activities, in which the supervisor recorded whether each listed teacher activity and corresponding student activity was carried out, together with descriptive notes explaining the observed classroom response. The third instrument was a structured post-observation interview protocol administered to the partner teacher, covering her own assessment of lesson delivery, alignment with the written plan, difficulties encountered by both teacher and students, and perceived strengths and areas for improvement. The fourth instrument was a coaching-practice rubric completed by an independent observer during the coaching rehearsal, rating five behavioral indicators, stating the interview purpose, listening actively to the coachee's responses, asking substantive questions, empowering the coachee throughout the conversation, and delivering an appropriate closing, each scored on a four-point scale ([Sugiyono, 2022](#)).

3.4 Data Collection Procedure

Data collection proceeded through three linked stages. Pre-observation involved a preliminary discussion with the partner teacher regarding her planned instructional system, confirming that the lesson plan had been prepared with reference to the simplified lesson-plan format. Observation involved direct classroom attendance during the scheduled lesson, during which the supervisor completed the classroom-practice observation instrument in real time, noting both whether each activity occurred and qualitative detail on how students responded. Post-observation involved the structured interview with the partner teacher, followed at a mutually agreed later date by a

GROW-technique coaching session addressing the instructional problems the teacher herself identified as most pressing ([Sugiyono, 2022](#)).

3.5 Data Analysis

Quantitative instrument data were analyzed using the scoring formulas specified on each instrument. For the classroom-practice observation instrument, the final score was computed as the assessment score multiplied by 100 and divided by the total possible score, with the resulting value classified according to a four-tier predicate scale: very good for scores from 91 to 100, good for scores from 81 to 90, adequate for scores from 71 to 80, and needing improvement for scores of 70 or below. For the coaching-practice rubric, the final score was computed as the score obtained divided by the ideal score of 20, multiplied by 100, with resulting values classified on a parallel four-tier scale in which a score of 85 to 100 corresponds to category A, 70 to 84 to category B, 56 to 69 to category C, and 55 or below to category D. Qualitative interview and coaching transcript data were analyzed descriptively by identifying recurring themes across the teacher's own reflections, the classroom observation notes, and the GROW coaching dialogue, with particular attention to any theme appearing consistently across more than one data source, since convergence across instruments was treated as an indicator of a genuine, rather than isolated, instructional issue ([Sugiyono, 2022](#)).

3.6 Ethical and Procedural Considerations

All observation and coaching activities were conducted with the informed agreement of the partner teacher and the endorsement of the school principal, consistent with the collaborative, non-punitive orientation of academic supervision described in the literature review. Video recordings of both the coaching-practice rehearsal and the actual coaching session with the partner teacher were made with participant consent to support instrument scoring and documentation, and identifying information beyond professional role and institutional affiliation was limited to what participants themselves agreed to disclose in the underlying practicum documentation ([Sugiyono, 2022](#)).

4. Results and Discussions

4.1 School and Lesson Context

SMPN 4 Mesuji is located in Gedung Boga, Way Serdang Subdistrict, Mesuji Regency, Lampung Province, approximately 6.3 kilometers from the supervisor's residence. The school is led by principal Sutoyo, S.Pd., M.M., with Rosmawati, S.Pd. serving as the science teacher who acted as partner teacher throughout this supervision cycle. The observed lesson addressed the topic of the human digestive system, delivered to a grade VIII class across two lesson hours using the problem based learning model, supported by PowerPoint slides and a printed chart, in a face to face instructional mode. This context matters for interpreting the results that follow, since a content-dense, discovery-oriented lesson of this kind places particular demand on both instructional media and classroom management capacity.

4.2 Lesson Plan Verification

The verification results for the teacher's written lesson plan against the simplified lesson-plan format mandated by the Ministry of Education and Culture Circular Letter Number 14 of 2019 show that all six core planning components examined formulating the lesson plan in accordance with the syllabus, principal evaluation of the plan, formulating specific learning objectives, sequencing introductory, core, and closing activities, selecting an appropriate learning model, and preparing supporting media had been completed by the teacher, as presented in Table 1. The verification also identified one qualitative limitation: although instructional media had been prepared, it was considered insufficiently engaging or underdeveloped relative to the instructional requirements. This finding foreshadows the more detailed media-related issues identified during classroom observation and coaching. Overall, the results indicate that the teacher's planning process was structurally sound and fully compliant with the mandated lesson-plan format, with instructional media quality remaining the only aspect requiring further improvement throughout the supervision cycle.

Table 1. Lesson plan component verification

Component	Verified	Note
Formulating the lesson plan per syllabus	Yes	Consistent with core and basic competencies
Principal evaluation of the lesson plan	Yes	Evaluation produced a sound lesson plan
Determining learning objectives	Yes	Objectives matched each science topic in the syllabus
Sequencing introductory, core, and closing activities	Yes	Activities matched the chosen model and method
Selecting an appropriate learning model	Yes	Model matched the material to be delivered
Preparing instructional media	Yes	Media prepared but assessed as insufficiently engaging

4.3 Classroom Practice Observation Results

The results of direct classroom observation across the introductory, core, and closing stages of the lesson recorded 42 indicators as fully implemented by the teacher, 3 indicators as implemented only from the student-activity side without a corresponding fully realized teacher activity, and 1 indicator applying new instructional approaches, materials, or methods across planning, delivery, and evaluation as not implemented, as presented in Table 2. This pattern produced a raw assessment score of 89 out of a total possible score, which, applying the instrument's scoring formula of assessment score multiplied by 100 and divided by the total possible score, yielded a final score of 94.7, placing the lesson within the very good category on the instrument's four-tier predicate scale. The near-complete implementation is consistent with a lesson that was well planned and competently delivered overall, with the single unimplemented indicator concerning innovation in instructional approach rather than any core teaching function.

Table 2. Classroom practice observation summary

Indicator	Value
Indicators fully implemented	42
Indicators partially implemented	3
Indicators not implemented	1
Raw score	89
Final score	94.7
Predicate	Very Good (91-100)

Within the observed activities, introductory-stage indicators, opening prayer, attendance checking, stimulus questioning connecting prior and new material, motivational framing, and outlining lesson objectives, were consistently rated as implemented, with observation notes describing students as responsive during attendance checking and generally attentive during motivational framing, though some students were noted as not fully attending during the explanation of lesson objectives. Core-stage indicators covering PowerPoint and chart-based stimulus presentation, small-group discussion, information gathering, and group presentation were likewise implemented, with notes indicating active student questioning during the media presentation stage, though again with some students described as less attentive to the displayed material, and some groups described as not yet fully orderly while forming discussion groups. Closing-stage indicators, guiding students to construct a summary, providing space for reflection, modeling positive learning habits, and administering a formative test, were fully implemented, with students able to articulate a summary of the lesson and to voice reflection on the material discussed.

4.4 Interview Findings with the Partner Teacher

A structured post-observation interview with the partner teacher elicited a candid self-assessment that diverged somewhat from the very good instrument score. Asked for her own view of the lesson just delivered, the teacher stated that she was not fully satisfied, noting she still perceived shortcomings in several respects. Asked whether the lesson matched her written plan, she affirmed that what had been planned had been implemented accordingly. Asked about the difficulties she faced, she identified limited time and difficulty maintaining classroom conducivity as her principal concerns, while noting that students' main difficulty was accessing engaging literature or learning resources on the topic. Asked to identify strengths and areas for improvement, she cited active student participation as a clear strength, while acknowledging that several aspects of her planning, particularly media preparation, required more thorough attention. The interviewer's own general impression recorded the delivery as clear and well aligned with stated indicators and objectives, with a suggestion to find better ways of maintaining classroom conducivity and to design more engaging instructional media.

4.5 Coaching Practice Rubric Results

Table 3. Coaching practice rubric results

Indicator	Rating (1-4)
Stating the interview purpose	4
Listening actively to the coachee	4
Asking substantive questions	3
Empowering the coachee during the interview	4
Delivering an appropriate closing	4

The coaching-practice rehearsal results, presented in Table 3, show that an independent observer assessed the supervisor's coaching competence across five behavioral indicators. The coaching session was conducted online using the GROW technique and evaluated on a four-point scale for each indicator. Four of the five indicators received the maximum score of 4, while the substantive-questioning indicator received a score of 3, making it the only indicator that did not reach the highest rating. This finding suggests that question formulation, rather than listening, closing, or empowering technique, represents the most immediate area for the supervisor-in-training's coaching development.

Table 4. Coaching practice final score

Obtained Score	Ideal Score	Final Score	Category
19	20	95	A

The indicator-level performance was translated into a single summary score by dividing the score achieved by the ideal score and multiplying the result by 100 according to the instrument's scoring formula, as presented in Table 4. The rehearsal yielded an obtained score of 19 against an ideal score of 20, producing a final score of 95 and placing the coaching-practice rehearsal within the highest category (A) on the instrument's four-tier scale. This result indicates that the single point lost on the substantive-questioning indicator was not sufficient to move the rehearsal out of the top performance band, underscoring that the supervisor's coaching competence was already well developed before the actual coaching session with the partner teacher described in the following section.

4.6 GROW Coaching Results with the Partner Teacher

The subsequent GROW-technique coaching session with the partner teacher, conducted online, followed the model's four stages in sequence. In the Goal stage, the coach clarified that the session's purpose was to identify a solution to a learning-related problem, to which the teacher agreed and expressed a wish to discuss and resolve difficulties from the observed lesson. In the Reality stage, the teacher identified classroom conducivity as the central recurring problem, attributing it partly to unattractive instructional media, and recounted that a prior attempt to address this problem, shifting a lesson into laboratory-based practical work, had instead made classroom conditions less, rather than more, controlled. In the Options stage, the teacher proposed improving and enriching instructional media so that students would find lessons more engaging, specifically identifying Canva as the tool

she intended to use, given that she had recently completed training in Canva-based media creation. In the Will stage, the teacher committed to implementing this Canva-based media redesign after the second-semester final examination period, while identifying support needs from fellow science teachers, from the principal in terms of facilities, and from parents in sustaining student learning motivation, framing these as necessary conditions for the plan's success.

The coaching session concluded with the teacher summarizing that classroom conducivity and unattractive instructional media were the core problems underlying the lesson's shortcomings, and that Canva-based media redesign represented her chosen solution, a conclusion the coach affirmed as a promising and appropriately targeted response to the problem as she had defined it.

4.7 Discussion

Read together, the four data sources in this study, lesson-plan verification, classroom observation, teacher interview, and GROW coaching dialogue, converge on a single central finding: classroom conducivity and instructional media attractiveness constitute the dominant obstacle in this lesson, even though the aggregate instrument score of 94.7 placed the lesson comfortably within the very good category. This pattern illustrates precisely the limitation anticipated in the literature review, that a high aggregate supervision score can mask a specific, localized weakness that only qualitative follow-up is able to surface ([Dorukbasi, 2024](#)). Had this supervision cycle relied on the classroom-practice instrument alone, the media and conducivity problem the teacher herself identified as most significant would likely have remained undocumented, since the instrument recorded 42 of 46 indicators as fully implemented and did not itself flag media quality as a scored deficiency.

The specific media limitation identified, reliance on PowerPoint slides and a printed chart offering verbal content without strong visual support, aligns with the broader finding that students in the current media environment respond more readily to instructional material combining visual and verbal information simultaneously rather than verbal content alone. This is precisely the gap that Canva-based instructional media has been shown to address in other science-classroom studies, where such media improved learning outcomes and engagement by presenting content through visually rich, customizable formats rather than static, text-heavy slides ([Rosyid & Setyasto, 2024](#)). The teacher's own proposed solution, migrating her instructional media to Canva, is therefore well supported by evidence that Canva-based media measurably improves student engagement, comprehension, and cognitive involvement in classroom activities generally and in elementary and secondary natural science instruction specifically ([Bella, Huda, Setyowati, & Nurodin, 2024](#); [Edlin, Reni, Hermita, & Barokah, 2025](#); [Jamaludin and Sedek \(2024\)](#)).

The classroom conducivity problem itself merits closer interpretation. The teacher's account that shifting to laboratory-based practical work previously worsened, rather than improved, classroom conditions suggests that conducivity in this case was not simply a function of the instructional method chosen, since problem based learning and practical work are both, in principle, well evidenced to support engagement in science classrooms ([Anggraeni, Prahani, Suprpto, Shofiyah, & Jatmiko, 2023](#); [Sari, & Enjoni, 2023](#)). Instead, the recurring problem appears more directly tied to the specific execution of group formation and media delivery within whatever method is used, a distinction consistent with evidence that problem based learning's benefit for critical thinking and engagement depends on the model being paired with sufficiently engaging supporting media and well-managed group process, rather than being guaranteed by the model's adoption alone ([Adnyani, & Suniasih, 2023](#); [Ansya, & Salsabilla, 2025](#)).

From a supervisory-process standpoint, the GROW coaching session itself performed the function the literature attributes to it: moving the conversation from a general acknowledgment of dissatisfaction, in the Goal stage, through a specific diagnosis grounded in the teacher's own account, in the Reality stage, to a concrete, tool-specific commitment, in the Options and Will stages, that the teacher herself selected based on training she had already undertaken. This progression mirrors findings that GROW-based coaching helps educators convert reflective insight into a time-bound, committed action plan more effectively than open-ended feedback alone by [Sadewo, Wibawa, Hanafi, and Purnasari](#)

(2025) and Anisur (2023), is consistent with evidence that coaching-based supervision meaningfully supports teachers implementing specific pedagogical changes, in this case a shift in media platform, rather than only reinforcing generic classroom competence (Nawas, 2023). The coaching-practice rubric score of 95 obtained during the separate rehearsal further supports the internal validity of this coaching process, since it indicates the coach's own listening, questioning, and closing behaviors met a high standard even before the actual coaching session with the partner teacher was conducted.

Taken together, these findings support all three working propositions advanced in the literature review. The classroom-practice instrument confirmed a very good aggregate rating despite isolated partial and unmet indicators, the combined interview and coaching data surfaced classroom conducivity and media attractiveness as specific weaknesses invisible to the aggregate score alone, and the GROW coaching session produced a concrete, self-owned corrective action, Canva-based media redesign, that the teacher is positioned to implement following the semester examination period. The case illustrates, at a practical level, why academic supervision benefits from combining structured quantitative instruments with qualitative, dialogic coaching rather than relying on either approach alone.

5. Conclusions

5.1 Conclusion

This study set out to describe the results of academic supervision instruments applied to a science teacher's lesson planning and classroom practice at SMPN 4 Mesuji, to identify the barriers surfaced through interview and GROW coaching dialogue, and to document the corrective action the coaching process generated. The classroom-practice observation instrument recorded 42 fully implemented indicators against 3 partially implemented and 1 not implemented, producing a final score of 94.7 and a very good predicate, while the separate coaching-practice rubric produced a final score of 95, also categorized as very good. Despite these strong aggregate scores, structured interview and GROW coaching dialogue consistently surfaced classroom conducivity and unattractive instructional media as the teacher's central concerns, a finding the aggregate instrument scores alone did not reveal. Through the GROW coaching process, the teacher independently identified Canva-based instructional media redesign as her corrective action, supported by training she had already completed, and committed to implementing this change following the semester examination period. The overall pattern confirms that academic supervision paired with GROW coaching provides a more complete picture of instructional quality than either quantitative instrument scoring or informal feedback alone, since the two approaches surface complementary information, aggregate performance on one hand and specific, teacher-owned problem diagnosis on the other.

5.2 Research Limitations

This study is limited by its single-case, single-lesson design, involving one science teacher, one class, and one Problem Based Learning lesson on a single topic, which restricts generalization to other teachers, subjects, or lesson formats. The classroom-practice and coaching-practice scores also rest on observation and rating by a single supervisor-in-training, without independent inter-rater scoring of the actual coaching session with the partner teacher, introducing the possibility of observer-specific bias in translating classroom events into checklist ratings. Finally, because the corrective action identified through coaching, Canva-based media redesign, was scheduled for implementation after the semester examination period, this study documents the commitment to change rather than its eventual classroom impact, leaving the actual effect of the proposed media redesign on classroom conducivity and student learning outcomes unverified within the scope of this report.

5.3 Suggestions and Directions for Future Study

Future supervision practice and research could extend this study by conducting a follow-up observation cycle after the teacher implements her Canva-based media redesign, allowing direct comparison of classroom conducivity and student engagement indicators before and after the change, which would test whether the corrective action identified through coaching produces the improvement the teacher anticipated. Expanding the design to include multiple teachers across different science topics and lesson formats would also help determine whether the classroom conducivity and media attractiveness themes identified here recur as a general pattern within this school or are specific to this

particular lesson and teacher. Future studies could additionally incorporate independent inter-rater observation during the actual coaching session, rather than only during the separate rehearsal, to strengthen the reliability of coaching-quality assessment, and could examine whether coaching conducted face to face produces different depth of reflection compared with the online coaching format used in this case.

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Author Contributions

VAW contributed to conceptualization, methodology, investigation, data collection, formal analysis, writing original draft. RR contributed to partner teacher for the academic supervision process, implementation of the instructional activities, data validation, and review of the findings. NS contributed to academic supervisor, supervision design, coaching implementation, validation, supervision, and writing review and editing. AS contributed to assistant supervisor, observation, documentation, data curation, administrative support, and writing review and editing. All authors have read and approved the final version of the manuscript.

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